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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/813,561

**Applicant(s)**

AHOLAINEN, MARKUS

**Examiner**

KAN YUEN

**Art Unit**

2464

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 17 February 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1, 2, 4-14, 17-21, 28-31, 33 and 35-39 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 4-14, 17-21, 28-31, 33, 35-39 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

***Response to Arguments***

***Allowable Subject Matter Withdrawal***

1. The allowable subject matters indicated in the previous office action have been withdrawn. A new ground(s) of rejection is made in view of Trossen (Pub NO.: 2004/0003058).

***Claim Objections***

2. Claim 33 is objected to because of the following informalities:

The applicant is suggested to cancel claim 33, because the claimed subject matters of claim 33 is already included in claim 28. Appropriate correction is required.

***Claim Rejections - 35 USC § 101***

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 19-21, 33 and 38 are directed to a computer-readable medium, wherein the term "computer-readable medium" is defined as wireless/radio wave communication networks by the specification see page 22, lines 20-25 would typically covers forms of non-transitory tangible media and transitory propagating signals per se in view of the ordinary and customary meaning of computer readable medium.

When the broadest reasonable interpretation of a claim covers a signal *per se*, the claim must be rejected under 35 U.S.C. § 101 as covering non-statutory subject matter. In an effort to assist the patent community in overcoming the rejection under 35 U.S.C. § 101, the USPTO suggest the following approach. A claim drawn to such a computer readable media (or the like) that covers both transitory and non-transitory embodiments may be amended to narrow the claim to cover only statutory embodiments to avoid a rejection under 35 U.S.C. § 101 by adding the limitation "non-transitory" to the claim; e.g. non-transitory computer readable media. Such an amendment would typically not raise the issue of new matter, even when the specification is silent because the broadest reasonable interpretation relies on the ordinary and customary meaning that includes signals *per se*.

#### ***Claim Rejections - 35 USC § 103***

4. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Isomura et al. (Pub NO.: 2002/0052966) in view of Craddock et al. (Pat No.: 6351771).

**For claim 1**, Isomura et al. disclosed the method comprising:

determining a protocol of an service discovery request received from a client (fig. 1, Appliance A-C) via a home proximity network (Isomura et al. see paragraph 0030-0031). A SDP handler using one SDP receives an inquiry message of service information from an appliance using a different SDP (first SDP);

translating the protocol of the service discovery request into a service discovery protocol by way of a generic service discovery format (Isomura et al. see paragraph 0030-0031, fig. 3). A format conversion unit in this SDP handler (second SDP) will convert a service information written in a common format and stored in the common database into a format of the different SDP, wherein the service information stored in the common database 11 is written in a common (generic) format that can be understood by all SDP handlers A-C;

wherein translating the service discovery request via a canonical query transform service operating on the home proximity network that interacts with clients to allow generic service discovery queries to be translated and subsequently issued via specific service discovery protocols (Isomura et al. see paragraph 0025-0032). In case of fig. 3, the service attributes 1 and 3 of the SDP handler A are similar to the service attributes 1 and 3 of the common database. Thus, the service information "AA" of the SDP handler

is converted into the service information "aa" written in the common format, wherein the common format is specific to each of the appliances A-C. When a format of the service information for the service attribute in the SDP handler is the same as the format of the service information in the common database, the format conversion unit does not convert. Since the term "canonical query transform" is not specifically define in the claim or in the specification, thus given the broadest interpretation, the examiner broadly interprets the conversion performed by the format conversion unit is equivalent to the canonical query transform;

wherein the translated service discovery protocols utilize an Internet-located service registry (Isomura et al. see fig. 4, common database 41) (Isomura et al. see paragraphs see paragraph 0035-0043). The common database 41 is associated with different types of SDPs, where the SDPs may be, for example, JINI, UPnP, Bluetooth SDP, SLP and etc. Although the Isomura et al. did not explicitly disclose the common database 41 as being an Internet-located database, however it is obvious to a person of ordinary skill in the art at the time of the invention to implement UPnP or any other internet-based SDP that is associates with the common database 41;

the translated service discovery request being used to discover an Internet service provider of the service requested (Isomura et al. see paragraphs 0030-0038). The inquiry message may include name of service information requested. The format conversion unit will convert the name of service information into the common format, and retrieve or search (discover) the common database. As an example in fig. 4 and fig. 5, a PDA 45 supporting Bluetooth can use a internet-based service of a Fax 46

supporting JINI through the server 40, and transmission protocol layer of RMI/TCP/IP with the common database 41, wherein the database 41 stored the common format of the Vender (provider) "XX ELECTRIC";

translating the service provided to the client by the service (Isomura et al. see paragraphs 0030-0031). Then the format conversion unit will convert the searched result from the common data base into a format in a SDP used in the inquired appliance, and the server will send the converted searched result to the inquired appliance;

Although Isomura et al. did not explicitly disclose the first ad hoc service discovery protocol, and second ad hoc service discovery protocol. However, According to page 13, line 15-20 of the present specification, the ad hoc network is defined as to have up to eight Bluetooth devices. Thus, according to paragraph 0020 of Isomura et al. the system can have a server 10 and two or more appliances (up to 8) using different SPDs e.g., Bluetooth SPDs (see paragraph 0003) in order to form an ad hoc network.

Thus, it would have been obvious to a person of ordinary skill in the art at the time of the invention to implement up to 8 appliances in the network of Isomura et al. to form an ad hoc network. The motivation for using the obviousness being that it increases scalability in the network.

Isomura et al. did not explicitly disclose the features for detecting incompatibilities between the client and the service provider; translating the service provided to the client in response to the detected incompatibilities. Craddock et al. from the same or similar fields of endeavor disclosed the features for detecting incompatibilities between the

client and the service provider; translating the service provided to the client in response to the detected incompatibilities (Craddock et al. see column 2, lines 10-22). A region manager connected to each of the region servers and communication clients is configured to determine the incompatibilities of the transmission data format and convert the data format to a second data format appropriate to aid other of the external service and the communication client.

Thus, it would have been obvious to a person of ordinary skill in the art at the time of the invention to implement the features as taught by Craddock et al. in the SPD server as taught by Isomura et al. The motivation for using the features being that it increases network compatibility by support multiple types of data format between external services.

7. Claims 14, 17-19, 28, 31 and 33 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Isomura et al. (Pub NO.: 2002/0052966).

**For claim 14**, Isomura et al. disclosed the system, comprising:

a service requestor (fig. 1, Appliance A-C) coupled to a home proximity network and configured to submit a service request (Inquiry message) using a first service discovery protocol (Isomura et al. see paragraph 0030-0031). A SDP handler using one SDP receives an inquiry message of service information from an appliance using a different SDP (first SDP);



a service translation proxy (SPD Handler A-C) coupled to the home proximity network and configured to: translate the first service discovery protocol of the service request into a second service discovery protocol by way of a generic service discovery format (Isomura et al. see paragraph 0030-0031, fig. 3). A format conversion unit in this SDP handler (second SDP) will convert a service information written in a common format and stored in the common database into a format of the different SDP, wherein the service information stored in the common database 11 is written in a common (generic) format that can be understood by all SDP handlers A-C;

wherein translating the service discovery request via a canonical query transform service operating on the home proximity network that interacts with clients to allow generic service discovery queries to be translated and subsequently issued via specific service discovery protocols (Isomura et al. see paragraph 0025-0032). In case of fig. 3, the service attributes 1 and 3 of the SDP handler A are similar to the service attributes 1 and 3 of the common database. Thus, the service information "AA" of the SDP handler is converted into the service information "aa" written in the common format, wherein the common format is specific to each of the appliances A-C. When a format of the service information for the service attribute in the SDP handler is the same as the format of the service information in the common database, the format conversion unit does not convert. Since the term "canonical query transform" is not specifically define in the claim or in the specification, thus given the broadest interpretation, the examiner broadly interprets the conversion performed by the format conversion unit is equivalent to the canonical query transform;

wherein at least one of the first and second service discovery protocols utilize an Internet-located service registry (Isomura et al. see fig. 4, common database 41) (Isomura et al. see paragraphs see paragraph 0035-0043). The common database 41 is associated with different types of SDPs, where the SDPs may be, for example, JINI, UPnP, Bluetooth SDP, SLP and etc. Although the Isomura et al. did not explicitly disclose the common database 41 as being an Internet-located database, however it is obvious to a person of ordinary skill in the art at the time of the invention to implement UPnP or any other internet-based SDP that is associates with the common database 41;

discover an Internet based service provider using the Internet located service registry, wherein the service provider is configured to provide the service requested (Isomura et al. see paragraphs 0030-0038). The inquiry message may include name of service information requested. The format conversion unit will convert the name of service information into the common format, and retrieve or search (discover) the common database. As an example in fig. 4 and fig. 5, a PDA 45 supporting Bluetooth can use a internet-based service of a Fax 46 supporting JINI through the server 40, and transmission protocol layer of RMI/TCP/IP with the common database 41, wherein the database 41 stored the common format of the Vender (provider) "XX ELECTRIC"; and

translate the service provided into a format that is compatible with the service requestor (Isomura et al. see paragraphs 0030-0031). Then the format conversion unit will convert the searched result from the common data base into a format in a SDP used

in the inquired appliance, and the server will send the converted searched result to the inquired appliance.

However, Isomura et al. did not explicitly disclose the first ad hoc service discovery protocol, and second ad hoc service discovery protocol.

Although Isomura et al. did not explicitly disclose the feature, however according to page 13, line 15-20 of the present specification, the ad hoc network is defined as to have up to eight Bluetooth devices. Thus, according to paragraph 0020 of Isomura et al. the system can have a server 10 and two or more appliances (up to 8) using different SPDs e.g., Bluetooth SPDs (see paragraph 0003) in order to form an ad hoc network.

Thus, it would have been obvious to a person of ordinary skill in the art at the time of the invention to implement up to 8 appliances in the network of Isomura et al. to form an ad hoc network. The motivation for using the obviousness being that it increases scalability in the network.

**Regarding claim 17**, Isomura et al. disclosed the apparatus, comprising:

means for receiving a service request (Inquiry message) from a service requestor (fig. 1, Appliance A-C) via a home proximity network (Isomura et al. see paragraph 0030-0031). A SDP handler using one SDP receives an inquiry message of service information from an appliance using a different SDP (first SDP);

means for translating the service request from a first service discovery protocol to a second service discovery protocol by way of a generic service discovery format (Isomura et al. see paragraph 0030-0031, fig. 3). A format conversion unit in this SDP handler (second SDP) will convert a service information written in a common format and

stored in the common database into a format of the different SDP, wherein the service information stored in the common database 11 is written in a common (generic) format that can be understood by all SDP handlers A-C;

wherein translating the service discovery request via a canonical query transform service operating on the home proximity network that interacts with clients to allow generic service discovery queries to be translated and subsequently issued via specific service discovery protocols (Isomura et al. see paragraph 0025-0032). In case of fig. 3, the service attributes 1 and 3 of the SDP handler A are similar to the service attributes 1 and 3 of the common database. Thus, the service information "AA" of the SDP handler is converted into the service information "aa" written in the common format, wherein the common format is specific to each of the appliances A-C. When a format of the service information for the service attribute in the SDP handler is the same as the format of the service information in the common database, the format conversion unit does not convert. Since the term "canonical query transform" is not specifically define in the claim or in the specification, thus given the broadest interpretation, the examiner broadly interprets the conversion performed by the format conversion unit is equivalent to the canonical query transform;

wherein at least one of the first and second service discovery protocols utilize an Internet-located service registry (Isomura et al. see fig. 4, common database 41) (Isomura et al. see paragraphs see paragraph 0035-0043). The common database 41 is associated with different types of SDPs, where the SDPs may be, for example, JINI, UPnP, Bluetooth SDP, SLP and etc. Although the Isomura et al. did not explicitly

disclose the common database 41 as being an Internet-located database, however it is obvious to a person of ordinary skill in the art at the time of the invention to implement UPnP or any other internet-based SDP that is associates with the common database 41;

means for locating a service provider to provide the service requested using the second service discovery protocol (Isomura et al. see paragraphs 0030-0038). The inquiry message may include name of service information requested. The format conversion unit will convert the name of service information into the common format, and retrieve or search (discover) the common database. As an example in fig. 4 and fig. 5, a PDA 45 supporting Bluetooth can use a internet-based service of a Fax 46 supporting JINI through the server 40, and transmission protocol layer of RMI/TCP/IP with the common database 41, wherein the database 41 stored the common format of the Vender (provider) "XX ELECTRIC"; and

means for translating the service provided into a format that is compatible with capability information associated with the service requestor (Isomura et al. see paragraphs 0030-0031). Then the format conversion unit will convert the searched result from the common data base into a format in a SDP used in the inquired appliance, and the server will send the converted searched result to the inquired appliance.

However, Isomura et al. did not explicitly disclose the first ad hoc service discovery protocol, and second ad hoc service discovery protocol.

Although Isomura et al. did not explicitly disclose the feature, however according to page 13, line 15-20 of the present specification, the ad hoc network is defined as to have up to eight Bluetooth devices. Thus, according to paragraph 0020 of Isomura et al. the system can have a server 10 and two or more appliances (up to 8) using different SPDs e.g., Bluetooth SPDs (see paragraph 0003) in order to form an ad hoc network.

Thus, it would have been obvious to a person of ordinary skill in the art at the time of the invention to implement up to 8 appliances in the network of Isomura et al. to form an ad hoc network. The motivation for using the obviousness being that it increases scalability in the network.

**Regarding claim 18**, Isomura et al. disclosed the means for receiving the service provided using a first transport protocol; and means for providing the service provided using a second transport protocol (Isomura et al. see paragraphs 0030-0031).

**Claim 19** is rejected similar to claim 17.

**Claim 33** is rejected similar to claim 19.

**Regarding claim 28**, Isomura et al. disclosed the apparatus comprising:  
a network interface (fig. 1 SDP Handler A-C) capable of communicating with a service requestor (fig. 1, Appliance) via a home proximity network using a first service discovery protocol and at least one Internet service provider (fig. 5, Internet-based Fax service) via a second service discovery protocol (Isomura et al. see paragraph 0030-0031). A SDP handler using one SDP (second SDP) receives an inquiry message of service information from an appliance using a different SDP (first SDP);

wherein at least one of the first and second service discovery protocols utilize an Internet-located service registry (Isomura et al. see fig. 4, common database 41) (Isomura et al. see paragraphs see paragraph 0035-0043). The common database 41 is associated with different types of SDPs, where the SDPs may be, for example, JINI, UPnP, Bluetooth SDP, SLP and etc. Although the Isomura et al. did not explicitly disclose the common database 41 as being an Internet-located database, however it is obvious to a person of ordinary skill in the art at the time of the invention to implement UPnP or any other internet-based SDP that is associates with the common database 41;

a processor (fig. 1, SPD server 10) coupled to the network interface and configured with instructions that cause the apparatus to:

receive a service request (Inquiry message) from the service requestor (fig. 1, Appliance A-C) (Isomura et al. see paragraph 0030-0031). When a SDP handler using one SDP receives an inquiry message of service information from an appliance using a different SDP (first SDP);

translate the service request from the first service discovery protocol to the second service discovery protocol by way of a generic service discovery format (Isomura et al. see paragraph 0030-0031, fig. 3). A format conversion unit in this SDP handler (second SDP) will convert a service information written in a common format and stored in the common database into a format of the different SDP, wherein the service information stored in the common database 11 is written in a common (generic) format that can be understood by all SDP handlers A-C;

wherein translating the service discovery request via a canonical query transform service operating on the home proximity network that interacts with clients to allow generic service discovery queries to be translated and subsequently issued via specific service discovery protocols (Isomura et al. see paragraph 0025-0032). In case of fig. 3, the service attributes 1 and 3 of the SDP handler A are similar to the service attributes 1 and 3 of the common database. Thus, the service information "AA" of the SDP handler is converted into the service information "aa" written in the common format, wherein the common format is specific to each of the appliances A-C. When a format of the service information for the service attribute in the SDP handler is the same as the format of the service information in the common database, the format conversion unit does not convert. Since the term "canonical query transform" is not specifically define in the claim or in the specification, thus given the broadest interpretation, the examiner broadly interprets the conversion performed by the format conversion unit is equivalent to the canonical query transform;

locate the service provider to provide the service requested via the second service discovery protocol (Isomura et al. see paragraphs 0030-0038). The inquiry message may include name of service information requested. The format conversion unit will convert the name of service information into the common format, and retrieve or search (discover) the common database. As an example in fig. 4 and fig. 5, a PDA 45 supporting Bluetooth can use a internet-based service of a Fax 46 supporting JINI through the server 40, and transmission protocol layer of RMI/TCP/IP with the common



database 41, wherein the database 41 stored the common format of the Vender (provider) "XX ELECTRIC"; and

translate the service provided into a format that is compatible with capability information associated with the service requestor as determined by the first and second service discovery protocols (Isomura et al. see paragraphs 0030-0031). Then the format conversion unit will convert the searched result from the common data base into a format in a SDP used in the inquired appliance, and the server will send the converted searched result to the inquired appliance.

However, Isomura et al. did not explicitly disclose the first ad hoc service discovery protocol, and second ad hoc service discovery protocol.

Although Isomura et al. did not explicitly disclose the feature, however according to page 13, line 15-20 of the present specification, the ad hoc network is defined as to have up to eight Bluetooth devices. Thus, according to paragraph 0020 of Isomura et al. the system can have a server 10 and two or more appliances (up to 8) using different SPDs e.g., Bluetooth SPDs (see paragraph 0003) in order to form an ad hoc network.

Thus, it would have been obvious to a person of ordinary skill in the art at the time of the invention to implement up to 8 appliances in the network of Isomura et al. to form an ad hoc network. The motivation for using the obviousness being that it increases scalability in the network.

**Regarding claim 31**, Isomura et al. disclosed the feature for receiving messages from the service provider using a first transport protocol; and transmitting the messages

received from the service provider to the service requestor using a second transport protocol (Isomura et al. see paragraphs 0030-0031).

8. Claims 20, 21 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Isomura et al. (Pub NO.: 2002/0052966) in view of de Hond (Pat NO.: 6002853).

**For claims 20 and 29**, Isomura et al. disclosed all the claimed invention with the exception of disclosing the feature wherein locating a service provider comprises forwarding the service request to another service translation proxy located within the network.

de Hond from the same or similar fields of endeavor disclosed the feature wherein locating a service provider comprises issuing the translated service request to the Internet- located service registry (de Hond see column 4, lines 32-47). Thus, it would have been obvious to a person of ordinary skill in the art at the time of the invention to use the feature as taught by de Hond in the network of Isomura et al. The motivation for using the obviousness being that it increases reliability in the network.

**Regarding claim 21**, de Hond disclosed the feature wherein locating a service provider comprises forwarding the service request to another service translation proxy located within the network (de Hond see column 4, lines 32-47).

9. Claim 30 is rejected under 35 U.S.C. 103(a) as being unpatentable over Isomura et al. (Pub NO.: 2002/0052966) in view of McConnell et al. (Pat No.: 6741695).

**For claim 30**, Isomura et al. disclosed all the claimed subject matter with the exception of disclosing the feature wherein translating the service provided comprises analyzing session descriptions contained within Session Initiation Protocol (SIP) messages exchanged between the service requestor and the service provider. McConnell et al. from the same or similar fields of endeavor disclosed the feature wherein translating the service provided comprises analyzing session descriptions contained within Session Initiation Protocol (SIP) messages exchanged between the service requestor and the service provider (McConnell et al. see column 6, lines 45-67, column 7, lines 30-50). The SIP server 34 may use a different set of parameters, or parameters in a different format, to provide services to subscriber devices connected to packet-switched network 16. As a result, part of the process of SIP server 34 obtaining service profile information for subscriber device 30 may include parsing the service profile, extracting the service parameters therefrom, and translating or reformatting the extracted service parameters into a form used by SIP server 34.

Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use the feature as taught by McConnell et al. in the network of Isomura et al. The motivation for using the feature being that it would be advantageous to make similar enhanced services available to the subscriber when operating on packet or circuit switched networks, thus it greatly improves compatibility.

10. Claim 36-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Isomura et al. (Pub NO.: 2002/0052966) in view of Gebhart (20050149294).

**For claims 36-39**, Isomura et al. disclosed all the claimed invention with the exception of disclosing the feature wherein the Internet-located service registry comprises a universal description, discovery, and integration registry.

Gebhart from the same or similar fields of endeavor disclosed the feature wherein the Internet-located service registry comprises a universal description, discovery, and integration registry (Gebhart see paragraph 0022). Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use the feature as taught by Gebhart et al. in the network of Isomura et al. The motivation for using the feature being that it increases accuracy in the network.

11. Claim 35 is rejected under 35 U.S.C. 103(a) as being unpatentable over Isomura et al. (Pub NO.: 2002/0052966) in view of Craddock et al. (Pat No.: 6351771) as applied to claim 1 above, and further in view of Gebhart (20050149294).

**For claim 35**, Isomura et al. and Craddock et al. disclosed all the claimed invention with the exception of disclosing the feature wherein the Internet-located service registry comprises a universal description, discovery, and integration registry.

Gebhart from the same or similar fields of endeavor disclosed the feature wherein the Internet-located service registry comprises a universal description,

discovery, and integration registry (Gebhart see paragraph 0022). Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use the feature as taught by Gebhart et al. in the network of Isomura et al. and Craddock et al. The motivation for using the feature being that it increases accuracy in the network.

12. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Isomura et al. (Pub NO.: 2002/0052966) in view of Craddock et al. (Pat No.: 6351771) as applied to claim 1 above, and further in view of McClure et al. (Pat No.: 7543056).

**For claim 2**, Isomura et al. and Craddock et al. both did not explicitly disclose the feature wherein translating the protocol includes selecting one of a plurality of service discovery interfaces that are compatible with the Internet-located service registry.

McClure et al. from the same or similar fields of endeavor disclosed the feature wherein translating the protocol includes selecting one of a plurality of service discovery interfaces that are compatible with the Internet-located service registry (see McClure et al. see column 13, lines 64-67 and column 14, lines 1-5).

Thus, it would have been obvious to a person of ordinary skill in the art at the time of the invention to implement the feature as taught by McClure et al. in the network as taught by Isomura et al. The motivation for using the features being that it increases transmission efficiency.

13. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Isomura et al. (Pub NO.: 2002/0052966) in view of Craddock et al. (Pat No.: 6351771) as applied to claim 1 above, and further in view of McConnell et al. (Pat No.: 6741695).

**For claim 4**, Isomura et al. and Craddock et al. disclosed all the claimed subject matter with the exception of disclosing the feature wherein detecting the incompatibilities comprises analyzing session descriptions contained within Session Initiation Protocol (SIP) messages exchanged between the client and the service provider. McConnell et al. from the same or similar fields of endeavor disclosed the feature wherein detecting the incompatibilities comprises analyzing session descriptions contained within Session Initiation Protocol (SIP) messages exchanged between the client and the service provider (McConnell et al. see column 6, lines 45-67, column 7, line 30-50). The SIP server 34 may use a different set of parameters, or parameters in a different format, to provide services to subscriber devices connected to packet-switched network 16. As a result, part of the process of SIP server 34 obtaining service profile information for subscriber device 30 may include parsing the service profile, extracting the service parameters therefrom, and translating or reformatting the extracted service parameters into a form used by SIP server 34.

Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use the feature as taught by McConnell et al. in the network of Isomura et al. and Craddock et al. The motivation for using the feature being that it

would be advantageous to make similar enhanced services available to the subscriber when operating on packet or circuit switched networks, thus it greatly improves compatibility.

14. Claims 5-9, 12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Isomura et al. (Pub NO.: 2002/0052966) in view of Craddock et al. (Pat No.: 6351771) and McConnell et al. (Pat No.: 6741695) as applied to claim 4 above, and further in view of Ravishankar (Pat No.: 7123710).

**For claim 5**, Isomura et al., Craddock et al. and McConnell et al. all disclosed the claimed invention with the exception of disclosing the feature wherein the session descriptions transmitted by the client reflect the capabilities of the client. Ravishankar from the same or similar fields of endeavor disclosed the feature wherein the session descriptions transmitted by the client reflect the capabilities of the client (Ravishankar see column 7, lines 22-37).

Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use the feature as taught by Ravishankar et al. in the network of Isomura et al., Craddock et al. and McConnell et al. The motivation for using the feature being that it saves system resources by sending a notification via a SIP.

**Regarding claim 6**, Ravishankar disclosed the feature wherein the capabilities of the client include media session capabilities (Ravishankar see column 7, lines 22-37).

**Regarding claim 7**, Ravishankar disclosed the feature wherein the session descriptions transmitted by the service provider reflect the capabilities of the service provider (Ravishankar see column 7, lines 22-37).

**Regarding claim 8**, Ravishankar disclosed the feature wherein the capabilities of the service provider include media session capabilities (Ravishankar see column 7, lines 22-37).

**Regarding claim 9**, Isomura et al. disclosed the feature wherein translating the service provided comprises translating media received from the service provider into a format compatible with the media session capabilities of the client (Isomura et al. see paragraphs 0030-0031). Then the format conversion unit will convert the searched result from the common data base into a format in a SDP used in the inquired appliance, and the server will send the converted searched result to the inquired appliance;

**Regarding claim 12**, Isomura et al. disclosed the feature wherein translating the service provided comprises: receiving messages from the service provider using a first transport protocol; and transmitting the messages received from the service provider to the client using a second transport protocol (Isomura et al. see paragraphs 0030-0031).

**Regarding claim 13**, Isomura et al. disclosed the feature wherein translating the service provided comprises: receiving messages from the client using the second transport protocol; and transmitting the messages received from the client to the service provider using the first transport protocol (Isomura et al. see paragraphs 0030-0031).



15. Claims 10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Isomura et al. (Pub NO.: 2002/0052966) in view of Craddock et al. (Pat No.: 6351771) and McConnell et al. (Pat No.: 6741695) as applied to claim 4 above, and further in view of Trossen (Pub No.: 2004/0003058).

**For claim 10**, Isomura et al., Craddock, and McConnell et al. all did not explicitly disclose the feature for modifying the session descriptions received from the client to match the session descriptions received from the service provider and transmitting the modified session descriptions to the service provider.

Trossen from the same or similar fields of endeavor disclosed the feature for modifying the session descriptions received from the client to match the session descriptions received from the service provider and transmitting the modified session descriptions to the service provider (Trossen see paragraphs 0029-0033, fig. 5). In order to locate such a display device, mobile 18 sends a Query message 50 to SIP proxy 14, which contains as a payload the description of the desired service (e.g., video quality). The format of the payload may be in SIP. Upon reception of the Query message 50 from the requester in SIP format, the SIP proxy 14 forms an appropriate service discovery message 52 and sends it to service agent 16. The service discovery message may be form by mapping the payload of the query message and the addition (modifying) of an identifier to identify the service agent 16 in the query message 50 (see fig. 8). Thus, it would have been obvious to a person of ordinary skill in the art at the

time of the invention to use the feature as taught by Trossen in the network of Isomura et al., Craddock, and McConnell et al. The motivation for using the feature being that it reduces transmission error.

**Regarding claim 11**, Isomura et al., Craddock, and McConnell et al. all did not explicitly disclose the feature for modifying the session descriptions received from the service provider to match the session descriptions received from the client; and transmitting the modified session descriptions to the client.

Trossen from the same or similar fields of endeavor disclosed the feature for modifying the session descriptions received from the service provider to match the session descriptions received from the client; and transmitting the modified session descriptions to the client (Trossen see paragraphs 0029-0033, fig. 5). Service agent 16 subsequently sends a service discovery response message 54 to SIP 14 describing devices such as service provider 12 that meet the requested requirements. Thus, the agent 16 includes the service provider 12 information in the response message 54.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KAN YUEN whose telephone number is (571)270-1413. The examiner can normally be reached on Monday-Friday 10:00a.m-3:00p.m EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky O. Ngo can be reached on 571-272-3139. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Kan Yuen/  
Examiner, Art Unit 2464

/Ricky Ngo/  
Supervisory Patent Examiner, Art  
Unit 2464

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